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For the reasons set forth above, Applicants respectfully request that the Section 112 rejections of Claims 19 and 20 be withdrawn.

The rejection of Claims 1-4, 7, 9, 10, 12, and 15-20 under 35 U.S.C. § 102(b) as being anticipated by Conrad (U.S. Patent No. 1,466,423) is respectfully traversed.

Conrad describes a primary cut-out which includes an outer socket member (2) and a removable plug member (4) which bears the fuse device for interrupting a circuit in case of overload or short circuit. Page 1, lines 101-107. Socket member (2) is illustrated in cross-section in Figure 2, while fuse element (4) is illustrated in Figure 3. Referring to the description of fuse element (4) at page 2, line 128, to page 3, line 43, the fuse (38) is enclosed in a tube (41) of fibre or bakelite, the upper end of which is secured to ferrule (37). At a lower end, the outer surface of tube (41) is machined down to a reduced diameter to receive lower ferrule (42). Enclosed within tube (41) is a large stranded conductor (43) connecting upper ferrule (37) with fusible link (51). A second end of fusible link (51) is connected to conducting wire (53) which provides a connection to end cap (54).

Claim 1 recites a fuse body that comprises "a first end, a second end and a bore extending therethrough for receiving a fuse element assembly, said bore comprising a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, said first cross sectional area larger than said second cross sectional area."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body having a bore therethrough which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, where the first cross sectional area is larger than the second cross sectional area. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 1, is analogous to a fuse holder, and therefore is not a fuse body.

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For the reasons set forth above, Claim 1 is submitted to be patentable over Conrad.

Claims 2-4 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-4 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-4 likewise are patentable over Conrad.

Claim 7 recites a fuse body for a fuse element assembly having an outer dimension. The fuse body comprises "a first end surface," "a second end surface" and "a longitudinal bore extending through said fuse body from said first end surface to said second end surface, said bore comprising a positioning portion and a clearing portion, said positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within said clearing portion."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body including a longitudinal bore which has a positioning portion and a clearing portion. Nor is a positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within the clearing portion described. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 7, is analogous to a fuse holder, and therefore is not a fuse body.

For the reasons set forth above, Claim 7 is submitted to be patentable over Conrad.

Claims 9 and 10 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 9 and 10 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 9 and 10 likewise are patentable over Conrad.

Independent Claim 12 recites a fuse which comprises "a fuse body comprising a first end, a second end and a bore extending therethrough, said bore comprising a clearing portion having a

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first cross sectional area and a positioning portion having a second cross sectional area; said first cross sectional area different than said second cross sectional area" and "a fuse element assembly situated in said bore, said fuse element assembly comprising an outer dimension substantially coextensive with said second cross sectional area, said outer dimension substantially centered within said first cross sectional area, thereby ensuring a clearance between said fuse element assembly and said fuse body within said clearing portion."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body with a bore which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area; the first cross sectional area different than the second cross sectional area. Further, a fuse element assembly having an outer dimension substantially coextensive with the second cross sectional area and substantially centered within the first cross sectional area to ensuring a clearance between the fuse element assembly and the fuse body is not described. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 12, is analogous to a fuse holder, and not a fuse body. For the reasons set forth above, Claim 12 is submitted to be patentable over Conrad.

Claims 15-20 depend, directly or indirectly, from independent Claim 12. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 12, Applicants submit that dependent Claims 15-20 likewise are patentable over Conrad.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-4, 7, 9, 10, 12, and 15-20 be withdrawn.

The rejection of Claims 6, 8, and 13 under 35 U.S.C. § 103 as being unpatentable over Conrad is respectfully traversed.

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Conrad is described above. Claim 6 depends from independent Claim 1 which recites a fuse body that comprises "a first end, a second end and a bore extending therethrough for receiving a fuse element assembly, said bore comprising a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, said first cross sectional area larger than said second cross sectional area."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body having a bore therethrough which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, where the first cross sectional area is larger than the second cross sectional area. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 1, is analogous to a fuse holder, and therefore is not a fuse body.

Claim 6 depends from independent Claim 1. When the recitations of Claim 6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 6 likewise is patentable over Conrad.

Claim 8 depends from independent Claim 7 which recites a fuse body for a fuse element assembly having an outer dimension. The fuse body comprises "a first end surface," "a second end surface" and "a longitudinal bore extending through said fuse body from said first end surface to said second end surface, said bore comprising a positioning portion and a clearing portion, said positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within said clearing portion."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body including a longitudinal bore which has a positioning portion and a clearing portion. Nor is a positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within the clearing portion described.

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Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 7, is analogous to a fuse holder, and therefore is not a fuse body.

Claim 8 depends from independent Claim 7. When the recitations of Claim 8 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 8 likewise is patentable over Conrad.

Claim 13 depends from independent Claim 12. Independent Claim 12 recites a fuse which comprises "a fuse body comprising a first end, a second end and a bore extending therethrough, said bore comprising a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area; said first cross sectional area different than said second cross sectional area" and "a fuse element assembly situated in said bore, said fuse element assembly comprising an outer dimension substantially coextensive with said second cross sectional area, said outer dimension substantially centered within said first cross sectional area, thereby ensuring a clearance between said fuse element assembly and said fuse body within said clearing portion."

Applicants respectfully submit that Conrad does not describe, or suggest, a fuse body with a bore which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area; the first cross sectional area different than the second cross sectional area. Further, a fuse element assembly having an outer dimension substantially coextensive with the second cross sectional area and substantially centered within the first cross sectional area to ensuring a clearance between the fuse element assembly and the fuse body is not described. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Applicants further respectfully

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submit that socket member (2), which appears to be the basis for the rejection of Claim 12, is analogous to a fuse holder, and not a fuse body. For the reasons set forth above, Claim 12 is submitted to be patentable over Conrad.

Claim 13 depends from independent Claim 12. When the recitations of Claim 13 are considered in combination with the recitations of Claim 12, Applicants submit that dependent Claim 13 likewise is patentable over Conrad.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 6, 8, and 13 be withdrawn.

The rejection of Claims 5, 11, and 14 under 35 U.S.C. § 103 as being unpatentable over Conrad in view of Reese et al. (U.S. Patent No. 5,214,406) is respectfully traversed.

Conrad is described above. Reese et al. describe a hollow insulating fuse body (4) preferably, having a square cross-sectional profile throughout its length. A preferably cylindrical passageway (9) extends longitudinally through the center of fuse body (4) and opens onto transversely extending flat end faces (13). Metal, square sided, terminal-forming end caps (6) are partially filled with solid bodies of solder and sized to fit over the ends of fuse body (4). A fuse wire (8) is provided sized to extend tautly diagonally across the opposite ends of the fuse body (4) and then pass over the end faces (13) and into annular, tapered cavities (15) formed between the side walls of the end caps (6) and outwardly tapered end portions of the fuse body (4). See Reese et al. at Column 3, line 61 to Column 4, line 9.

Claim 5 depends from independent Claim 1. Claim 1 recites a fuse body that comprises "a first end, a second end and a bore extending therethrough for receiving a fuse element assembly, said bore comprising a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, said first cross sectional area larger than said second cross sectional area."

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Applicants respectfully submit that Conrad in view of Reese et al. does not describe, or suggest, a fuse body having a bore therethrough which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area, where the first cross sectional area is larger than the second cross sectional area. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Reese et al. is only cited for its teaching of a rectangular body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 1, is analogous to a fuse holder, and therefore is not a fuse body.

Claim 5 depends from independent Claim 1. When the recitations of Claim 5 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 5 likewise is patentable over Conrad in view of Reese et al.

Claim 11 depends from independent Claim 7. Claim 7 recites a fuse body for a fuse element assembly having an outer dimension. The fuse body comprises "a first end surface," "a second end surface" and "a longitudinal bore extending through said fuse body from said first end surface to said second end surface, said bore comprising a positioning portion and a clearing portion, said positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within said clearing portion."

Applicants respectfully submit that Conrad in view of Reese et al. does not describe, or suggest, a fuse body including a longitudinal bore which has a positioning portion and a clearing portion. Nor is a positioning portion dimensioned to receive the outer dimension of the fuse element and maintain the fuse element in a substantially centered position within the clearing portion described. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Reese et al. is only cited for its teaching of a rectangular body. Applicants further respectfully submit that socket member (2), which appears

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to be the basis for the rejection of Claim 7, is analogous to a fuse holder, and therefore is not a fuse body.

Claim 11 depends from independent Claim 7. When the recitations of Claim 11 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 11 likewise is patentable over Conrad in view of Reese et al.

Claim 14 depends from independent Claim 12. Independent Claim 12 recites a fuse which comprises "a fuse body comprising a first end, a second end and a bore extending therethrough, said bore comprising a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area; said first cross sectional area different than said second cross sectional area" and "a fuse element assembly situated in said bore, said fuse element assembly comprising an outer dimension substantially coextensive with said second cross sectional area, said outer dimension substantially centered within said first cross sectional area, thereby ensuring a clearance between said fuse element assembly and said fuse body within said clearing portion."

Applicants respectfully submit that Conrad in view of Reese et al. does not describe, or suggest, a fuse body with a bore which includes a clearing portion having a first cross sectional area and a positioning portion having a second cross sectional area; the first cross sectional area different than the second cross sectional area. Further, a fuse element assembly having an outer dimension substantially coextensive with the second cross sectional area and substantially centered within the first cross sectional area to ensuring a clearance between the fuse element assembly and the fuse body is not described. Rather, Applicants submit that the tube (41) of Conrad, in which fusible link (51) resides and to which connections to the fusible link (51) are provided through connections to conductors (43, 53), is analogous to a fuse body. Reese et al. is only cited for its teaching of a rectangular body. Applicants further respectfully submit that socket member (2), which appears to be the basis for the rejection of Claim 12, is analogous to a

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fuse holder, and not a fuse body. For the reasons set forth above, Claim 12 is submitted to be patentable over Conrad.

Claim 14 depends from independent Claim 12. When the recitations of Claim 14 are considered in combination with the recitations of Claim 12, Applicants submit that dependent Claim 14 likewise is patentable over Conrad in view of Reese et al.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 5, 11, and 14 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kalra et al. :
Serial No.: 09/874,453 : Art Unit: 2835
Filed: June 5, 2001 : Examiner: Vortman, A.
For: FUSE ELEMENT POSITIONING :
BODY :

SUBMISSION OF MARKED UP CLAIMS

Hon. Commissioner for Patents
Washington, D.C. 20231

In furtherance of the response to the Office Action dated November 6, 2002, Applicants hereby submit marked up versions of the amendments therein:

IN THE CLAIMS

19. (once amended) A fuse in accordance with Claim 18 said fuse body further comprising a guide portion intermediate said positioning portion and said clearing portion, wherein said guide portion extends for a third length, said third length less than said first length.

Respectfully Submitted,



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